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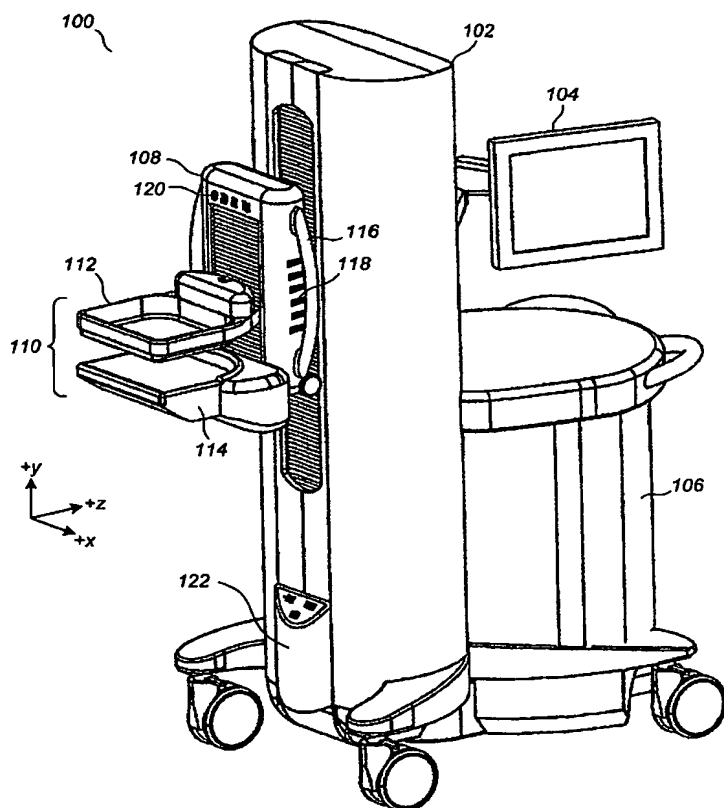
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR FULL-FIELD BREAST ULTRASOUND SCANNING



(57) Abstract: A full-field breast ultrasound (FFBU) scanning apparatus (100) and related methods are described for compressing and ultrasound scanning a breast. The scanning apparatus comprising a gantry (108) that supports a breast compression and scanning assembly (110), a compression assembly (112), and a scanning assembly (114). The scanning assembly (114) comprises a frame (214) having a taut film sheet (216) extending thereover. A transducer translation mechanism holds a transducer surface against a second surface of the film sheet (216) while translating the transducer thereacross to scan the breast. A liquid coupling agent recycling station is coupled to the scanning assembly (114) via appropriate irrigation system.



GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/31434

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 8/00
US CL : 600/437

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 600/407-472; 128/916

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,474,072 A (Shmulewitz) 12 December 1995 (12.12.1995), See entire document.	1-20
A, T, E	US 6,682,484 B1 (Entrekin et al.) 27 January 2004 (27.01.2004), See entire document.	1-20

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US03/31434

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: ultrasound, mammogram, breast, reservoir, irrigation, coupling agent, transducer